

same enter AP 2/15/06
AMENDMENTS TO THE CLAIMS

1-5. (Canceled)

6. (Currently Amended) A battery charging apparatus which charges a battery, comprising:

a voltage detecting circuit arranged and configured to detect a battery voltage of said battery and for outputting a signal in response to a detected battery voltage;

a current detecting circuit arranged and configured to detect a charging current supplied to said battery and for outputting a signal in response to a detected charging current;

a charging circuit arranged and configured to control said charging current such that said detected battery voltage increases to become substantially equal to a first pre-set voltage in response to a first input control signal and also such that said detected charging current becomes substantially equal to a constant current predetermined in response to a second input control signal; and

a charge control circuit that instructs said charging circuit by said first and said second input control signals to set said first pre-set voltage and said constant current in response to said signal from said voltage detecting circuit.

wherein the charge control circuit is arranged and configured to instruct the charging circuit to perform constant current charging to flow a first constant current to the battery and subsequently to flow a second constant current greater